IMAGING AND ANALYZING PARAMETERS OF SMALL MOVING OBJECTS SUCH AS CELLS

Abstract of the Disclosure

Light from an object such as a cell moving through an imaging system is collected and dispersed so that it is imaged onto a plurality of separate detectors. The light is spectrally dispersed by a plurality of spaced-apart dichroic reflectors, each detector receiving light from a different one of the dichroic reflectors. Each dichroic filter reflects light of a different predefined color, passing light of other colors. The output signal from each detector is indicative of a different characteristic of the object. In one configuration, each detector is provided with a separate imaging lens. In another configuration, the detectors are spaced at varying distances from the corresponding dichroic reflectors, so that separate imaging lenses are not required.